City of Cayce



Department of Public Safety Fire Marshal Division

Two Lavern Jumper Rd Cayce, SC 29033

Office (803) 550-9523 Fax (803) 794-2393

Welcome to the City of Cayce Fire Marshal's Office. The fire marshal's office is dedicated to protecting our citizens and visitors of our city. Our office reviews the following fire plan-reviews under the current adopted 2012 International Building Code, International Fire Code, International Mechanical Code and all other codes or ordinances that might apply.

- New Construction, Commercial, Multi Family, Renovations, Tenant-Upfits, Additions
- 2. Site Plan: Access, Waterline and Fire Hydrant Placement
- 3. Fire Protection: Fire Sprinkler, Standpipe, Fire Alarm, Fire Pumps, Wet Chemical Hood Systems, Clean Agents, Mechanical Smoke Systems, Hood Duct Systems

Plan Submittal

Plans can be submitted electronically (PDF,CD, Thumb Drive) or on traditional paper. One set of stamped plans are required for the fire review. All plans submitted shall have the correct physical address assigned to the project. This office has an approximately 10 working day turn around for plan reviews.

Provide one copy of the completed floor plan on a CD or Thumb Drive for the use of our division to create a Pre-Incident Response Plan.

Fire Stopping Detailed Shop Drawings (UL or FM) shall also be submitted to this office. A set of drawings shall be on the construction site at all times.

All required permits shall be on site at all times. If a permit for the scheduled inspection is not on site, the inspection will be required to be rescheduled.

A working fire hydrant with a 5 inch storz connection shall be within 300 ft of the construction site road travel distance prior to going vertical. Access to the construction site shall meet the weight of a 32 ton fire apparatus and shall have clearance around the construction site at all times.

Fire Protection Plans Review Requirements

Fire Sprinklers

Full detailed plans with calculations
Backflow Preventers (Double Check)
Please see Fire Department Connection (FDC) special requirements

Fire Standpipe and Fire Pumps

Full detailed plans with calculations

Fire Alarm

Full detailed plans ** The fire alarm system shall be designed to meet the Building requirements and any future expansion.** (Smoke & Heat Detectors, CO Detectors, DUCT Detectors, Flow Devices)

Wet Chemical, Clean Agent, Mechanical Smoke, Commercial Hood & Ducts Full detailed plans

Emergency Response Radio Coverage

All new buildings are required to have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communications systems of the jurisdiction at the exterior of the building. An outside emergency radio contactor shall perform the test. An approved plan shall be submitted to this office.

Additional Requirements

- The address shall be posted on the building. The Numbers shall be legible and visible from the street. The numbers shall be 4 inches or larger.
- The City of Cayce requires Knox Box(s) to be installed on the outside of the building(s). Elevator boxes are required at each elevator lobby. Both boxes can be ordered on line at www.knoxbox.com. Just enter zip code 29033.

- An exterior Emergency Electrical Disconnect is required at the building electrical source.
- On a non fire sprinklered building, a fire hydrant with a 5 inch storz connection shall be within 300 ft road travel distance of the structure. No islands, trees, bushes or barriers etc. shall not be included when figuring the travel distance.
- On a fire sprinklered building, a fire hydrant with a 5 inch storz connection shall be installed within 40 ft of the Fire Department Connection (FDC). No islands, trees, bushes or barriers etc. shall not be included when figuring the travel distance.
- The fire department connection (FDC) shall be free standing or remote from the building. The connection shall be a single five (5) inch thread-less storz connection and shall have a 30-45 degree downward defection.
- A building over 16 foot tall shall have an approved permanent roof access.
- Attic access shall meet all the requirements so that firefighters wearing protective equipment can gain access to the attic area. IMC 306
- All electrical, mechanical and fire equipment rooms shall be labeled.
- All electrical and gas meters shall be labeled with address or suite numbers.
- Shall provide the classification on all floor coverings. It shall meet a Class One or Two rating.
- All business that has excessive amounts of chemicals shall post a NFPA 704 sign on the exterior of the building facing the street.







Storz FDC

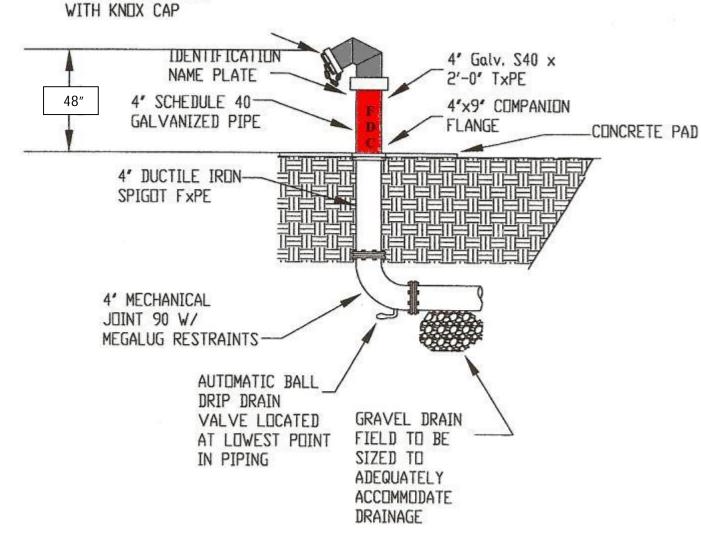
Storz Fire Hydrant

Fire Department Connection FDC Requirements

The City of Cayce requires the Fire Department Connection FDC to be a standalone connection. The connection must follow all International Fire Code and NFPA requirements. The FDC connection shall meet all test requirements.

- 1. The fire department connection FDC shall be a free standing and remote from the building at a distance from the building equal to 150 % of the height of the exterior wall.
- 2. The FDC shall be equipped with a signal five (5) inch Storz connection and shall have a 30-45 degree downward deflection. The Storz connection shall connect to the pipe outlet from the building using National Standard Threads. The FDC piping underground shall be equipped with a ball drip valve to ensure there is no standing water in the connection and that the piping does not freeze.
- 3. The FDC shall be arranged to face a paved roadway, sidewalk or other approved area and shall be installed so that it will not interfere with access to the building when hoses are laid from the closest public hydrant to the FDC. The FDC shall be located on the same side of the lot/or building as the closet public fire hydrant or a maximum of one hundred (100) feet.
- 4. The FDC shall be arranged so that the connection is no more than (48) inches above the finished grade, sidewalk or location of the connection.
- 5. The standing pipe to the connection shall be painted red and with 4 inch white letters FDC applied on top of the red painted pipe.
- 6. Where the FDC is subject to vehicle damage, the connection shall be protected per International Fire Code 312.

5"x4" BRASS 120° STORZ Fire Department Connection FDC FREE STANDING FDC



F.D.C. DETAIL SCALE: 1/2" = 1'-0"

Fire Department Connection Sign

Wherever the fire department connection (FDC) is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign mounted above the connection. If you have a standalone fire department connection, for instance on a parking lot island or along a street, the sign shall posted on a post not blocking the connection. The sign shall be a minimum 14" inch wide and 12" high with a white back ground with red letters.



Directly under the FDC lettering other information is added as needed, such as the type of system, the areas of the building that the system serves, location, or a directional arrow.